Ground Water Management and Protection

The New Jersey Department of Environmental Protection, Division of Water Resources, is the primary agency responsible for managing and regulating water resources in the state both for quality and for quantity. The New Jersey Water Supply Authority Act (1981), the Water Supply Bond Act (1981), and the New Jersey Water Supply Management Act (1981) are elements of the state program to protect and manage ground water sources. The New Jersey Water Supply Master Plan provides the framework for planning the water supply developments of the future. Although the state has regulated ground water withdrawals for public supplies since 1910 and other users since 1947, it was not until 1981 that all ground water users, including users of supplies exempt due to "grandfather rights," were required to obtain a permit and report monthly withdrawals to the Division of Water Resources. Seriously depleted aquifers in the coastal areas are now subject to special management controls by their designation as Water Supply Critical Areas. Within such areas, in order to avoid excessive drawdowns or salt water intrusion, all existing wells are required to reduce their withdrawals by a specified percentage and to use surface water or exempted aquifers instead. Feasibility studies are conducted to develop these alternatives. Within such areas all withdrawals of over 10,000 gallons per day are controlled.

The Water Supply Bond Act provides a fund of $350 million for planning, designing, acquiring, and constructing water supply facilities as outlined in the Water Supply Master Plan and for ground water studies that do not involve construction. The New Jersey Geological Survey, an agency of the Division of Water Resources, and the USGS are currently engaged in aquifer studies covering the Atlantic City, Camden, N.W. Mercer, and South River areas and defining the extensive buried valley aquifer systems in the northern part of the state.

New Jersey has developed a state ground water discharge permit program pursuant to the New Jersey Clean Water Act of 1976. This program controls existing and future sources of contamination to ground water. About 2000 facilities will eventually require permits. Ground water quality standards and an aquifer classification system have been put into place to provide the basis for effluent limitations.

Under sponsorship of the Department of Environmental Protection, a long-range program for protection of aquifers is being developed by Rutgers University. Similarly, a demonstration project for aquifer protection is being carried out by Middlesex County, with the aid of a consultant retained by the state.